

What is claimed is:

1. An image compression method for compressing image data, comprising:

a compression characteristics storing step for storing compression characteristics data indicating compression characteristics of plural types of images in advance;

a first compression parameter acquisition step for acquiring an initial compression parameter;

a second compression parameter acquisition step for acquiring a corrective compression parameter; and

a compression process step for performing a compression process on image data of an image to be compressed based on the initial compression parameter or the corrective compression parameter, wherein

the compression characteristics indicate a relationship between a bit rate, which is a ratio between data volume and the number of pixels of image data, and a compression parameter associated with image quality and compression rate of the compression process;

the first compression parameter acquisition step acquires the initial compression parameter based on compression characteristics data of an average image and a target bit rate; and

the second compression parameter acquisition step includes the steps of:

acquiring information indicating complexity of the image to be compressed based on the bit rate of compressed image data acquired at the compression process step, compression parameter used at the compression process step, and the compression characteristics data; and

acquiring the corrective compression parameter based on compression characteristics data of an image having the complexity and the target bit rate.

2. The image compression method according to claim 1, wherein the compression process is a compression process based on JPEG standard, and wherein the compression parameter is a Q-value.

3. An image compression apparatus for compressing image data, comprising:

a compression characteristics storing section for storing compression characteristics data indicating compression characteristics of plural types of images; and

a compression process section for performing a compression process on image data of an image to be compressed, wherein

the compression characteristics indicate a

relationship between a bit rate, which is a ratio between data volume and the number of pixels of image data, and a compression parameter associated with image quality and compression rate of the compression process;

5 the compression process section includes a compression parameter acquisition unit for acquiring an initial compression parameter and a corrective compression parameter, and a compression process performing unit for performing the compression process based on the initial
10 compression parameter or the corrective compression parameter;

the compression parameter acquisition unit acquires the initial compression parameter based on compression characteristics data of an average image and a target bit
15 rate and acquires the corrective compression parameter based on information indicating complexity of the image to be compressed, the compression characteristics data of an image having the complexity, and the target bit rate; and

the compression process section estimates the
20 complexity of the image to be compressed based on the bit rate of compressed image data acquired by the compression process, compression parameters used at the compression process, and the compression characteristics data.

25 4. The image compression apparatus according to claim 3,

wherein the compression process is a compression process based on JPEG standard, and wherein the compression parameter is a Q-value.

5 5. An image compression apparatus for compressing image data, comprising:

a compression characteristics memory which stores compression characteristics data indicating compression characteristics of plural types of images; and

10 a compression processor which performs a compression process on image data of an image to be compressed, wherein

the compression characteristics indicate a relationship between a bit rate, which is a ratio between data volume and the number of pixels of image data, and a
15 compression parameter associated with image quality and compression rate of the compression process;

the compression processor includes a compression parameter acquisition unit which acquires an initial compression parameter and a corrective compression
20 parameter, and a compression process performing unit which performs the compression process based on the initial compression parameter or the corrective compression parameter;

the compression parameter acquisition unit acquires
25 the initial compression parameter based on compression

characteristics data of an average image and a target bit rate and acquires the corrective compression parameter based on information indicating complexity of the image to be compressed, the compression characteristics data of an
5 image having the complexity, and the target bit rate; and

the compression processor estimates the complexity of the image to be compressed based on the bit rate of compressed image data acquired by the compression process, compression parameters used at the compression process, and
10 the compression characteristics data.